

Jordan Valley
Authority

Business Process
Mapping:
Budgeting and
Accounting Cycle

Financial Accounting
System Program

July 2000

OSC Member
FAS Team Member



FORWARD

Collaborative Approaches for Resolving Water Issues



Business Process Mapping Reports:

- General Process Mapping
- Expenditure Business Cycle
- Inventory and Fixed Assets Business Cycle
- Revenue Business Cycle
- ✓ **Budget and Accounting Business Cycle**
- Workshop Business Cycle
- Payroll and Personnel Cycle



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ACRONYMS

AP	Accounts Payable
AR	Accounts Receivable
CBJ	Central Bank of Jordan
COA	Chart of Accounts
FA	Fixed Assets
GBD	General Budget Department
GFO	General Financial Order
GSD	General Supplies Department
GL	General Ledger
H/W	Hardware
IC	Inventory Control
JC	Job Costing
MOF	Ministry of Finance
MTF	Monthly Financial Transfers
OE	Order Entry
PO	Purchase Order
RDBMS	Relation Database Management System
SFO	Special Financial Order
SGWA	Southern Ghors and Wadi Araba
S/W	Software
WIP	Work In Progress

ARABIC EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

Currently, the JVA uses cash-based accounting. The system handles all transactions according to instructions set by the Ministry of Finance (MOF) and provides the financial reports the MOF requires. The system does not, however, provide JVA decision-makers with the information necessary to run their business effectively and in the most efficient way. The main objective of implementing the Financial Accounting System (FAS) is to establish an accrual-based accounting system which will provide the JVA with financial information in the form of a balance sheet, an income statement, a cash-flow statement and periodic financial and operational reports.

Currently, financial accounting at the JVA consists of two systems: budgeting and accounting. This report describes the systems in more detail and makes recommendations for changes necessary to implement an accrual-based system.

Usually a budget is used as a planning and monitoring tool for all activities undertaken by an organization. At the JVA, however, the budget is used to monitor expenditures. We recommend the following changes in the budget system:

- Establish procedures for reporting on the status of goals while continuing monthly budget reporting to the Ministry of Finance.
- Expand the budget process to include formal planning and goal setting which then drive the financial resources needed to achieve goals.
- Use the budget/planning process to communicate JVA strategies.

Recommended changes in the accounting system are the following:

- The current ledgers are insufficient. Those which should be maintained under the new system include the following:
 - Accounts receivable subsidiary
 - Accounts payable subsidiary
 - Expenses subsidiary
 - Revenue subsidiary
 - General
- In order to maximize efficiency, the JVA needs more reports than those required by the MOF. Additional reports should be prepared on aging of accounts receivable, on inventory, and on cost centers.

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CHAPTER 1

INTRODUCTION

Like any other Jordanian government organization, the JVA uses cash-based accounting. The current system handles all transactions according to instructions set by the Ministry of Finance (MOF) and provides the financial reports the MOF requires. The system does not, however, provide JVA decision-makers with the information necessary to run their business effectively and in the most efficient way. Adoption of an accrual-based accounting system would remedy that situation.

Currently, financial accounting at the JVA consists of two systems: budgeting and accounting. The budget system maintains the following:

- Codes
- Allocation requests, general financial orders, special financial orders
- Transfers of allocations and remittances (financial transfer requests for budget line items)
- Budget expenditures and forecasts.

The accounting system does the following:

- Validates fund adequacy and authorizes payments
- Maintains records of all payment vouchers (which include vendor name and financial information)
- Maintains records on all kinds of money-in-trust collected for other agencies.

A general overview of the procedures used in both systems was provided in “General Process Mapping.” This report describes the systems in more detail and makes recommendations for changes necessary to implement an accrual-based accounting system. The reporting requirements of the Ministry of Finance and the computer systems used within this cycle are discussed separately.

CHAPTER 2

BUDGET PREPARATION

Preparing the budget for the coming year usually starts between July and August. By the end of the physical year, JVA submits its final budget proposal to the General Budget Department for approval. The process starts with a circular from the Office of the Prime Minister to ministries, which includes instructions that represent government policies on social and economic development. For example, the circular for the year 2000 includes but is not limited to the following:

- Increase allocations to improve employee productivity
- Concentrate on social, health services programs
- Concentrate on governmental roads and building maintenance
- No appropriations for fixed assets acquisition

The heads of each JVA section, division, directorate, and department prepare capital budget forecasts for the next financial year. Each forecast is submitted to an appropriate supervisor for review and comments.

Department and directorate forecasts are sent to the finance directorate for review and manually entered on special forms. Forms are sent to the Secretary General's office. The financial director uses the information and other supporting documents to prepare the budget forecast for the entire JVA.

The JVA Assistant Secretary General for Financial Affairs has to submit the proposed budget to the Secretary General (SG) for review. After that, the proposed budget is submitted to the Minister of Water and Irrigation for approval then. Before the end of the year, it goes to the Government General Budget Department for review and approval before it is sent for final ratification.

New Allocations

The budget is reallocated after the final approval if initial estimates prove to be inaccurate or in the case of financial emergencies. In either instance, funds are re-allocated. No increase or decrease in the total amount appropriated is allowed.

Re-allocations are made by the finance director who is responsible for transferring funds and for monitoring transfers in the expenditure register. The finance director prepares the transfers and presents the justification for the re-allocation to the Assistant Secretary General for Financial Affairs, after the approval of the SC, re-allocations are sent to the General Budget Department for final approval.

CHAPTER 3

BUDGET SYSTEM

The JVA budget is found in Chapter 64 of the general government budget each fiscal year. Chapter 64 is classified into three categories of allocations:

- 64/1 – Current Expenditures
- 64/2 – Capital Expenditures/Funded by the Treasury
- 64/3 – Capital Expenditures/Funded through Loans

3.1 Current Expenditures

This classification does not include expenditures made to employees assigned to projects.

Program	Responsible Department
64/1-a Administration and supporting services	Administration and finance
64/1-b Land and rural development	Land and rural Dep.
64/1-c Dams and Irrigation	Dams (Dep.) Irrigation (Dep.)
64/1-d Operation and maintenance	Northern and Middle Ghors
64/1-h Environment studies and quality control	Environmental studies (Dir.)
64/1-o Southern Ghors and Wadi Araba	Southern Ghors and Wadi Ghors

3.2 Capital Expenditures / Funded by the Treasury

Program	Responsible Department
64/2-a Administration and supporting services	Administration and finance
64/2-b Land and rural development	Land and rural Dep.
64/2-c Dams and Irrigation 64/2-c (1) Dams (Projects) 64/2-c (2) Irrigation Projects)	Dams (Dir.) Irrigation(Dir.)
64/2-d Operation and maintenance	Northern and Middle Ghors
64/2-h Environment studies and quality control	Environmental studies (Dir.)
64/2-o Southern Ghors and Wadi Araba	Southern Ghors and Wadi Ghors

3.3 Capital Expenditures / Funded by Loans

Program	Responsible Department
64/3-a Administration and supporting services	Administration and finance
64/3-b Land and rural development	Land and rural Dep.
64/3-c Dams and Irrigation 64/3-c (1) Dams (Projects) 64/3-c (2) Irrigation Projects)	Dams (Dir.) Irrigation(Dir.)
64/3-h Environment studies and quality control	Environmental studies (Dir.)

Capital expenditures are allocated to programs (i.e. directorates) as follows:

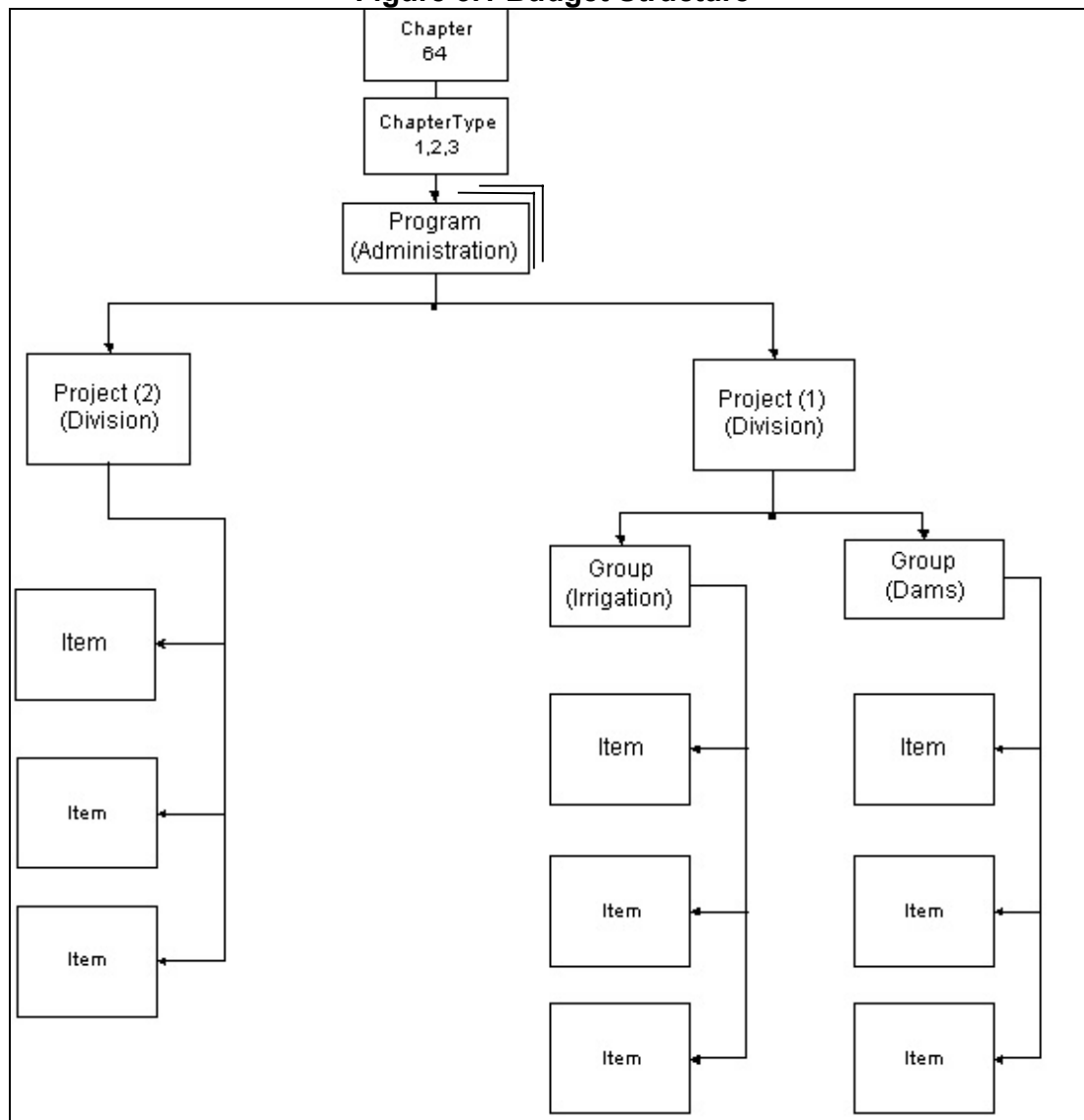
- Administration and Supporting Services (a)
- Land and Rural Development (b)
- Dams and Irrigation (c)
- Operations and Maintenance (d)
- Environment Studies and Quality (e)
- Southern Ghors and Wadi Araba (f)

Programs may have one or many projects. For example, Chapter 64/3 contains the dams and irrigation program (C) which has two projects: dams (budget number 64/3/C/1) and irrigation (budget number 64/3/C/2). "Dams" is Project 1. It falls under two groups: Consultation, Research and Studies (number 504) and Construction and Works (number 508). Groups are then classified into budget line items and cash is allocated to them. For Group 504, they are the following:

- Engineering Services and Supervision for the Al-Karameh Dam; 64/3/c/1/504/1
- Supervision for the Al-Mujib Dam; 64/3/c/1/504/2
- Water Quality and Precipitation Studies for the King Talal Reservoir; 64/3/c/1/504/3
- Services and Supervision for the Al-Tanour Dam; 64/3/c/1/504/4
- Engineering Services and Supervision for the Al-Karameh Dam; 64/3/c/1/504/5

The chart on the following page illustrates the structure of the budget.

Figure 3.1 Budget Structure



3.4 General and Special Financial Orders

Funds cannot be spent without financial orders from the MOF. After ratification of the General Budget Law, a general financial order (GFO) is issued by the MOF to cover all running expenses of Chapter 64/1, including salaries and wages of JVA employees. A special financial order (SFO) is issued to cover allocations for capital expenditures within Chapter 64/2. All allocations are made by monthly financial transfers (MFT), it is estimated to be 1/12 of the total budget. The MFT's are prepared by the financial director and are sent to the MOF which then transfers funds to the JVA account in the Central Bank of Jordan. Checks can then be drawn on the account.

If the budget law is not ratified by January, The Ministry of Finance then issues a GFO and an SFO for Chapters 64/1 and 64/2 respectively for 1/12 of the suggested budget. This

order is called “One-twelfth.” If for any reason an expense is recorded against a budget line item according to the One-twelfth Order, the amount has to be de-allocated from the balance of that budget line item when the budget is finally approved.

3.5 Monthly Financial Transfers

After the GFO and SFO are issued, the JVA expense section prepares transfer forms for the MOF to cover expenditures allowed. This is done monthly or whenever funds are needed. A transfer allows any government entity to start disbursing funds by issuing checks. As mentioned previously, normally transfers are 1/12 of budget line item balances. A financial ceiling accompanies transfers indicating cash available.

3.6 Budget Custody Transfers

Funds in budget line items can be exhausted during the course of the fiscal year. In such cases, a request for a transfer of funds between budget line items is submitted to the MOF for approval. Custody Transfers may take place from the JVA budget to other government budgets. Such custody transfers are called “allocation deductions.

3.7 Munaqaleh

Munaqaleh is a transfer of allocations from a budget line item to another budget line item within the same chapter and in compliance with the budget law articles, the transfer should be approved by the General Budget Department.

Munaqaleh can occur only if there is an excess of funds to transfer from other line items. Excess funds are de-allocated from such items, such de-allocations are called tanzeel in Arabic.

Both munaqaleh and tanzeel are done with the same form. The total de-allocation from one or more budget line items should equal the amount transferred to one or more budget line items. It is, in short, exactly like a double entry accounting transaction. A transfer is issued to allow the JVA to disburse the amount requested. Transfers are subject to the following Government General Budget Law rules and regulations:

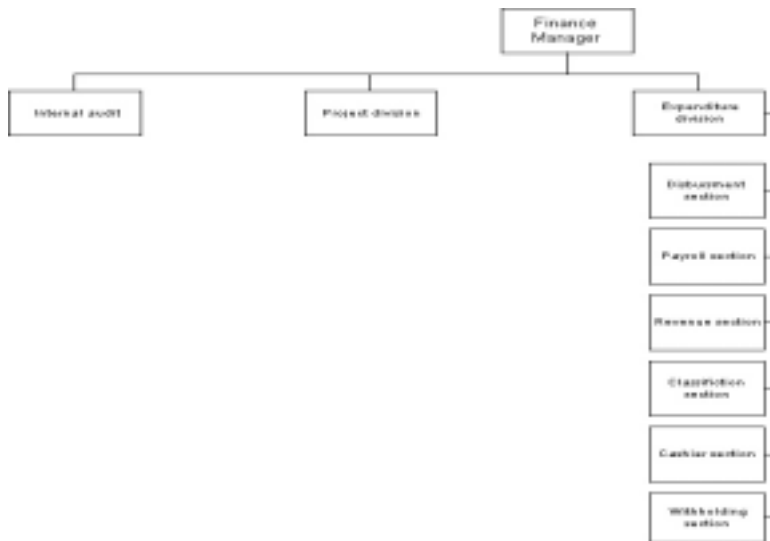
- It is not permissible to transfer funds other than those already allocated. Also, it is not permissible to spend more funds than are remitted.
- It is not permissible to transfer funds from capital expenditures to current expenditures provided the Ministry of Finance approves. It is permissible to transfer funds from current expenditures to capital expenditures provided GBD approval.
- It is not permissible to transfer funds allocated under 64/1/x/100 of current expenditures which includes salaries, wages, and allowances to any other item.

CHAPTER 4

THE ACCOUNTING SYSTEM

Figure 4.1 illustrates the organization of the Finance Directorate at the JVA.

Figure 4.1 Structure of the JVA Finance Directorate



4.1 Recording

The following ledgers and journals are currently kept manually in the Directorate:

- Disbursement ledger
- Cash journal
- Money-in-trust cash journal
- Money-in-trust sub-ledger
- Subsidiary disbursement ledger
- Revenue ledger

In addition to the manual ledgers and journals, the finance directorate uses a computerized system to record the transactions.

4.1.1 Disbursement Ledger

Disbursements are made with payment vouchers that are usually issued against a certain budget line item or against an intermediate special account like money-in-trust or revenues. The JVA accounting system keeps track of all payment vouchers issued along with information on accounts payable, including payments to outside parties.

Each page of this ledger represents a line item of the budget. The total amount allocated for each item is recorded at the top of the page by the disbursement section. At the end of each month, the disbursement section receives all invoices due, provided for, and recorded in the disbursement ledger. A financial transfer is prepared and signed by the financial director then approved by ministry of finance. When the cashier section submits the yellow payment voucher to the disbursement section, the disbursement section records the transfer in the disbursement ledger. In addition to the manual ledgers, the disbursement section uses the computer to account for expenditures, so invoices are recorded on the computer also.

When the cashier section enters the payment voucher into the computer, it is posted directly to the computerized disbursement ledger.

Sometimes the financial transfer approved by the budget department is less than the invoice amount due for the current month. In that case, the disbursement section prepares a payment voucher for invoices with high priorities.

4.1.2. Cash Journal

The cashier maintains the cash journal using double entry accounting. In the reference column, the cashier uses the serial number of the payment voucher given by the data entry clerk. The cashier prepares the bank reconciliation on a monthly basis.

4.1.3 Money-In-Trust Cash Journal

This journal is similar to the cash journal used by the cashier, but it is used solely for money-in-trust accounts (salaries and stamps) which are documented in more detail in the expenditure cycle document.

4.1.4 Money-In-Trust Sub-ledger

The general revenue section maintains this ledger to classify money-in-trust (other than salaries and stamps) according to its nature and description.

4.1.5 Subsidiary Disbursement Ledger

The classification section is responsible for this ledger which is organized like the disbursement ledger. Copies of payment vouchers and related documents are submitted to the classification clerk who records the vouchers in the subsidiary disbursement ledger and files them serially. The serial numbers given by the cashier are used as references. At the end of each month, the classification clerk compares the subsidiary disbursement ledger with the disbursement ledger maintained by the disbursement section.

4.1.6 Revenue Ledger

All types of cash and check collection take place in the revenue section. In order to control cash collection, the section maintains a revenue ledger. It includes all types of revenues except water sales of the Northern Directorate and sales of farming units and housing land.

The types of revenue recorded in the ledger are the following:

- Tourism land rentals
- Penalties
- Stamp sales
- Others (transportation, employees' telephone...etc)
- Water sales from the Southern Ghors and Wadi Araba Directorate
- Tenders
- Agricultural land rentals
- Gas station leases
- Commissions from agricultural land rental
- Electrical energy sales
- Water sales to governmental agencies

Revenues are recorded using double entries in the revenue ledger. The revenue section deposits cash and checks in the Central Bank of Jordan daily and prepares the bank reconciliation. When the revenue section receives the cash and/or checks, a receipt voucher is prepared in triplicate. The white copy goes to the payee and the blue and red copies stay in the revenue section.

At the end of each month the revenue section prepares a payment voucher, issues checks in favor of the Ministry of Finance, and prepares a monthly revenue summary according to type of revenue.

4.1.7 Financial Statement Reporting

The Finance directorate sends monthly reports to the Ministry of Finance; all such reports are generated either manually or by the budget and accounting computer system. The reports concentrate on cash accounts and balances rather than on financial reporting and the results of operations. A list of these reports as provided by the Ministry of Finance follows.

- Monthly summary of the expenditure account, which includes a summary of monthly transactions and balances.
- Monthly summary of the money-in-trust account, which includes a summary of monthly transactions and other "suspended" account transactions.

- Summary of the money-in-trust detailed accounts which shows opening balances, total receipts, total payments and ending balance for each account.
- Bank reconciliation report for the expenditure account and the money-in-trust account with a copy of the last page of the bank statement.
- Monthly financial status report showing monthly expenditures as per the disbursement journal.
- List of outstanding checks and other outstanding amounts as per the bank reconciliation.
- List of amounts transferred, received and paid.
- List of petty cash amounts and monthly balances.

CHAPTER 5

RECOMMENDATIONS

Below are the primary weaknesses we found in both cycles with recommendations for improvements and the changes in procedures necessary to implement the FAS.

5.1 Budget Recommendations

Usually a budget is used as a planning and monitoring tool for all activities undertaken by an organization. At the JVA, however, the budget is used to monitor expenditures. We would recommend the following measures be adopted to remedy this situation.

5.1.1 Establish procedures for reporting on the status of goals while continuing monthly budget reporting to the Ministry of Finance.

The current procedure is to report cash payments and receipts to the MOF on a monthly basis. We recommended that a formal goal setting process be incorporated into the budget process (see below) which includes performance expectations and measures to evaluate progress toward achieving those goals. This information should be incorporated in the monthly budget reporting process so that a clear association between resources expended and accomplishments can be evaluated.

5.1.2 Expand the budget process to include formal planning and goal setting which then drive the financial resources needed to achieve goals.

The JVA does some planning during the budgeting process which identifies specific projects and objectives. A formal document that incorporates this information should be expanded to include goal setting at the directorate level. At a minimum, this would ensure that financial resources are aligned with the work being performed at the JVA.

5.1.3 Use the budget/planning process to communicate JVA strategies.

As previously mentioned, the JVA should formalize the goal setting process and performance measures into a document tied to the budget resources to be given to every manager and department head at the JVA. The document will be the tool managers use to communicate with employees and to coordinate with each other on work priorities for achieving the goals.

5.2 Accounting Recommendations

The main objective of the Financial Accounting System (FAS) is to establish an accrual-based accounting system which will provide the JVA with financial information in the form of a balance sheet, an income statement, a cash-flow statement and periodic financial and operational reports. The implementation of the FAS will require the following:

- Redesigning of processes
- Changes in procedures and workflow
- Additional controls
- Maintaining subsidiary ledgers
- Maintaining a general ledger
- No money in trust should be considered as Revenue.

5.2.1 Ledgers

Currently, JVA ledgers are insufficient. The ledgers that should be maintained under the new system include the following:

- Accounts receivable subsidiary
- Accounts payable subsidiary
- Expenses subsidiary
- Revenue subsidiary
- General

The subsidiary ledgers must include information such as opening balances for individual accounts, dates of transaction, reference numbers (invoice numbers), descriptions of the transactions and amounts due. The same thing applies to other subsidiary ledgers such as inventory, bank accounts, prepaid expenses, accrued expenses and fixed assets. The aforementioned subsidiary ledgers can be generated for each cost center. The general ledger is the one in which all the information in subsidiary ledgers is accumulated. As such it is the primary source for generating financial statements.

5.2.2 Reports

In order to maximize efficiency, the JVA needs more reports than those required by the MOF. The details of the reports will depend on the flexibility of the FAS and how its features are utilized. Financial reports, which should be generated by the new system, include those on the following topics:

- Aging: to classify accounts receivable according to nature and time outstanding (i.e. trade receivable, employees' receivable or non-trade receivable).

- Inventory including:
 - Breakdown of inventory written-off.
 - Slow moving items.
 - Minimum re-order quantities.
 - Maximum or/and minimum prices for any item in the stores.
 - Quantities received or issued for any item in the stores.
- Cost centers: to measure their performance and to compare it with what is expected and with historical data.